This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

In the Claims:

- 1. CANCELED.
- 2. CANCELED.
- 3. CANCELED.
- 4. CANCÈLED.
- 5. CANCELED.
- 6. CANCELED.
- 7. CANCELED.
- 8. (Currently Amended) A method of forming a plastics material article comprising the steps of:

forming an injection moulded preform between a stationary base mould part and a movable substitutable part which together define an initial mould cavity for injection of the preform,

moving the substitutable mould part after injection of plastics material into the initial mould cavity to leave the preform stationary on the base mould part,

positioning over the preform in place of the substitutable mould part at least one replacement mould part to define a cavity larger than the initial mould cavity,

stretching at least part of the preform away from the base mould part against the replacement mould part(s) to form a finished article shape, and

removing the replacement mould part(s) in order to release the finish formed article,

wherein the Substitutable Mould Past is separated from the preform after the latter has skinned against it, but before the preform has solidified throughout its thickness, at least in the portion of it to be stretched,

wherein the method includes injection of gas between it and the Base Mould Part to separate at least part of the preform from the Base Mould Part.

wherein the stretching of the preform is effected by injection of gas between it and the Base Mould Part,

wherein the stretching of the preform is effected by lifting a portion of the preform from at least part of a main piece of the Base Mould Part by a movable piece of the Base Mould Part,

wherein the lifted portion of the preform is moved by the movable piece of the Base Mould Part as far as a corresponding piece of the Replacement Mould Part(s),

wherein the lifted portion of the preform is captivated between the movable piece of the Base Mould Part and the corresponding piece of the Replacement Mould Part(s) at the end of the stroke of the movable piece, and

A forming method as claimed in claim 7, wherein the captivation of the lifted portion of the preform temporarily seals apertures in the lifted portion.

- 9. (Previously Presented) A forming method as claimed in claim 8, wherein the injection of gas is started before the movable piece of the Base Mould Part is moved.
- 10. (Previously Presented) A forming method as claimed in claim 8, wherein the injection of gas is started before the replacement with the Replacement Mould Part(s) is complete.
- 11. (Previously Presented) A forming method as claimed in claim 10, wherein the preform is attached to a main piece of the Base Mould Part by virtue of this piece being polished, at least locally.

- 12. (Previously Presented) A forming method as claimed in claim 11, wherein the preform is stretched from a portion of it temporarily captivated by the Replacement Mould Part(s).
- 13. (Previously Presented) A forming method as claimed in claim 12, wherein the preform is stretched to substantially the final shape of the finish formed article.
- 14. (Previously Presented) A forming method as claimed in claim 13, wherein a stretched portion of the preform is urged into contact with the replacement Mould Part(s) for its final temperature control by application of increased gas pressure on the Base Mould Part side of the preform (which may be from gas applied for lifting and/or stretching of the preform) and/or by application of reduced gas pressure on the Replacement Mould Part(s) side of the preform.
- 15. (Previously Presented) A forming method as claimed in claim 14, wherein the enlarged mould cavity is defined by a plurality of Replacement Mould Parts.
- 16. (Original) A forming method as claimed in claim 15, wherein the enlarged mould cavity is assembled by radial movement of the Replacement Mould Parts into their replacement position.
- 17. (Original) A forming method as claimed in claim 15, wherein the enlarged mould cavity is assembled by pivotal movement of the Replacement Mould Parts into their replacement position.
- 18. (Previously Presented) A forming as claimed in claim 17, wherein the plurality of Replacement Mould Parts are provided with ducts for temperature control fluid and the article is brought to the temperature required for it to be sufficiently rigid for its removal by passage of temperature control fluid through the ducts after stretching and prior to opening of the Replacement Mould Parts.

- 19. (Previously Presented) A forming method as claimed in claim 14, wherein the enlarged mould cavity is defined by a single, or one per impression where the tool has multiple impressions, Replacement Mould Part moved bodily into its replacement position.
- 20. (Original) A forming method as claimed in claim 19, wherein the or each single Replacement Mould part is provided with ducts for temperature control fluid and the article is brought to the temperature required for it to be sufficiently rigid for its removal by passage of temperature control fluid through the ducts after stretching and prior to opening of the Replacement Mould Part(s).
- 21. (Original) A forming method as claimed in claim 19, wherein the single Replacement Mould part is provided with ducts for temperature control fluid and the article is brought to the temperature required for it to be sufficiently rigid for its removal by passage of temperature control fluid through the ducts after stretching and both prior to and after removal of the Replacement Mould Parts.
- 22. (Previously Presented) A forming method as claimed in claim 21, wherein the stretched portion of the preform is stretched by between a factor of 2:1 and 4:1.
- 23. CANCELED.
- 24. CANCELED.
- 25. CANCELED.
- 26. CANCELLED

27. (Currently Amended) A tool for forming a plastics material article, the tool comprising:

a stationary base mould part,

a substitutable mould part for defining in conjunction with the stationary base part an initial mould cavity mounted for axial movement towards and away from the base mould part,

an injection gate on the first mould part for controlling injection of plastics material into the initial mould cavity to produce a preform,

at least one replacement mould part movably carried by the base mould part of the substitutable mould part for movement from a withdrawn position to an advanced position in which the replacement mould part(s) and the stationary base mould part together provide a cavity of greater volume than the initial mould cavity defining the outside shape of the finish formed article,

a movable piece in the base mould part for lifting a portion of the preform from the base mould part, the movable piece being adapted to seal against a main piece of the base mould part during injection moulding of the preform, and

a gas connection internally of the main piece and the movable piece of the base mould part for enable gas pressure to be applied to the side of the preform facing the base mould part to stretch the preform on to the replacement mould part(s), the gas passing through an aperture in the main piece that is opened when the movable piece is lifted,

A mould tool as claimed in claim 23, wherein the movable piece has a face shaped complementarily with both the opposite face of the Substitutable Mould Part and the Replacement Mould Part(s), whereby the liftable portion of the preform is moulded to final shape in the initial mould cavity.

28. CANCELLED

29. CANCELLED

- 30. (Currently Amended) A mould tool as claimed in claim 29 27, wherein a plurality of Replacement Mould Parts are translationally mounted on the Base Mould Part for movement to form the enlarged cavity and means is provided for moving the Replacement Mould Parts between their withdrawn position and their advanced position.
- 31. (Currently Amended) A mould tool as claimed in claim 29 27, wherein a plurality of Replacement Mould Parts are pivotally mounted on the Base Mould Part for movement to form the enlarged cavity and means is provided for moving the Replacement Mould Parts between their withdrawn position and their advanced position.
- 32. (Original) A mould tool as claimed in claim 31, wherein the means for moving the Replacement Mould Parts includes a slidable member mounted on the Base Mould Part and respective connecting rods connecting the slidable member and the Replacement Mould Parts, the slidable member and the rods being arranged for advance and withdrawal of the Replacement Mould Parts between a withdrawn position in which the Substitutable Mould Part can close on the Base Mould Part and an advanced position in which the Replacement Mould Parts can close on the Base Mould Part.
- 33. (Currently Amended) A mould tool as claimed in claim 29 27, wherein a single, or one per impression where the tool has multiple impressions, Replacement Mould Part is translationally mounted on the Substitutable Mould Part or on the Base Mould Part for bodily movement to provide the enlarged cavity.
- 34. (Original) A mould tool as claimed in claim 33, including a vacuum duct in the Replacement Mould Part extending from an external vacuum connection point to at least one internal vacuum point opening into the enlarged cavity, whereby the finish formed article can

be held in the enlarged cavity on withdrawal of the Replacement Mould Part from the Base Mould Part.

35. (Previously Presented) A mould tool as claimed in claim 34, including:

a first slide and actuator carried on the Substitutable Mould Part or on the Base Mould Part, the slide extending at least substantially radially of a centerline of the mould tool

a Replacement Mould Part carrier slidably mounted on the slide under control of the actuator and

a second slide and actuator carried on the carrier and extending at least substantially parallel to the centerline of the mould tool, the Replacement Mould Part being mounted on the second slide under control of the second actuator.

36. (Original) A mould tool as claimed in claim 35, in combination with a control system adapted and arranged for:

actuation of the first actuator for inwards radial movement of the carrier and Replacement Mould Part after opening of the Substitutable Mould Part to align the Replacement Mould Part with the Base Mould Part and outwards after stretching of the preform,

reciprocating actuation of the second actuator for axial movement of the Replacement Mould Part into abutment with the Base Mould Part for stretching of the preform and out of abutment after stretching of the preform.

37. CANCELLED